associated with NOAC use included rate/rhythm control treatments (OR: 0.78, 95% CI 0.73-0.83) and SSRI/SNRI antidepressants (OR: 0.87, 95% CI 0.79-0.96). Regional variation in initiation of NOACs versus warfarin was also observed. **CONCLUSIONS:** Multiple comorbidities may be associated with lower likelihood of NOAC initiation, as recently observed in other jurisdictions. Such uptake patterns have implications for real-world cost-effectiveness and outcomes studies.

PCV156
INVESTMENT ASPECTS OF GENERIC DRUG POLICIES IN COUNTRIES WITH SEVERE RESOURCE CONSTRAINTS
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OBJECTIVES: The objective of generic drugs policies can be defined as reduction in health care expenditure without compromising health outcomes. This definition is based on the disinvestment aspect of drug policies. However, the objective of generic drug policies can be also defined from an investment perspective, especially in those countries with volume limits for the use of original patented drugs due to economic constraints: increase in population health gain by improved patient access without need for additional health expenditure. Our objective was to compare benefits of generic drugs policies in Germany vs Hungary. **METHODS:** We reviewed the grey literature and IMS database to identify pharmaceutical products with (1) patent expiry in recent years, (2) major therapeutic advancement to previous standard therapies, (3) no direct therapeutic alternative at patent expiry, (4) pharmacy distribution and consequently reliable IMS sales records in different countries. Then we compared aggregated annual volume sales in DOT and ex-factory sales for the selected pharmaceuticals in +/- 3 years before and after first generic entry. **RESULTS:** In this analysis we present the case of clopidogrel. In Germany the volume sales of clopidogrel products increased by 1.7% with 3 years after first generic entry, in Hungary the increase was 120.5%. The ex-factory sales were reduced after patent expiry in both countries, by 30.1% in Germany and by 59.5% in Hungary. **CONCLUSIONS:** In Germany off-patent clopidogrel generated significant savings without volume increase. In Hungary generic products significantly improved the accessibility of patients to clopidogrel therapy, in addition to reducing pharmaceutical expenditure. Incremental health gain of off-patent medicines should not be underestimated in those countries, where accessibility of patients to patented medicines in restricted.

PCV157
THE IMPACT OF DRUG POLICY ON THE UTILIZATION OF MEDICINES FOR TREATMENT OF CARDIOVASCULAR DISEASES IN SLOVAK REPUBLIC
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OBJECTIVES: From the total health care costs in Slovak Republic the costs of medicines for treatment of cardiovascular diseases represent about 25%. In the world the proportion is at 8-10%. Accurate data on morbidity from cardiovascular disease in Slovak Republic is not available. National Health Information Center is processing the data on prevalence and incidence of circulatory system diseases, but this includes only those patients who are followed in cardiology in SR. Reportedly, the prevalence of cardiovascular diseases in SR is about 250 000 patients (50.8/1000 inhabitants). **METHODS:** The utilization of medicines in period from 2008 to 2013 for treatment of cardiovascular diseases was analysed quantitatively by inderect descriptiv method of evaluating supply of medicines in quantitative units (number of packages), in the number of DDD and in financial indicators reflecting the full value of consumed package. Data were gained from National Health Center and State Institute of Drug Control. **RESULTS:** The decline of consumption expressed in number of packages was observed in the group of cardiac therapy and by peripheral vasodilatators. The groups of beta blocking agents, agents acting on the renin-angiotensin system and lipid modifying agents showed increase in consumption. In DDD units the consumption deacreased most significantly in the group of peripheral vasodilatators. Rise in DDD units was observed in the group of beta blocking agents, antihypertesives, beta blocking agents, agents acting on the renin-angiotensin system and lipid modifying agents. Atorvastatin was active agent with highest consumption in DDD. The highest average price per package was calculated by lipid modifying agents. After access of generic drugs to the market in 2008 the consumption in financial units declined while consumption in DDD grew in followed period. **CONCLUSIONS:** By using the same amount of health care expenditures there is the possibility to provide treatment to more patients with cardiovascular disease.

PCV158
LOCAL VARIATION IN PRIMARY CARE PRESCRIBING BEHAVIOR IN ENGLAND: TICAGRELOR
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OBJECTIVES: To understand the level of local variation in community-level prescribing of ticagrelor in England, after national-level recommendation from NICE. **METHODS:** Monthly GP-Practice-level prescribing data was collected for antiplatelet drugs (Chapter 2.9 of British National Formulary [BNF]) in England, between August 2011 and February 2013. Data was obtained from the Health and Social Care Information Centre (HSCIC) and analyzed in Statistical Analysis Software (SAS). The percentage of total antiplatelet spend (net ingredient cost) attributed to ticagrelor was calculated for each GP Practice and Clinical commissioning Group (CCG) cluster. **RESULTS:** Despite national-level NICE guidance (December 2011) recommending the use of ticagrelor for Acute Coronary Syndrome, uptake of ticagrelor at CCG level varied greatly between August 2011 and February 2013. The proportion of total antiplatelet spend on ticagrelor in February 2013 ranged from 0% to 34·91%, between CCGs. The highest relative use of ticagrelor was clustered around the Yorkshire region. **CONCLUSIONS:** The ticagrelor example suggests that a positive National level (NICE) recommendation does not necessarily translate into common local prescribing behavior. Local variation (the fifth hurdle of market access) should be considered by pharmaceutical companies when developing market access strategy.

PCV159
DRUG UTILISATION IN CARDIOVASCULAR DISEASES MANAGEMENT IN SLOVAKIA: 8 YEARS OVERVIEW
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OBJECTIVES: Atherosclerotic cardiovascular diseases (CVD) remain the major cause of premature death in Europe. CVD treatment and precribing behavior remains a major challenge for the doctors, payers and regulatory bodies. Key aim of our study was to collect and compare reliable and comparable data on drug utilization for CVD therapy in Slovakia during 8 years (2005-2012). **METHODS:** We utilized review of available costs data sources connected to ATC classification and to cardiovascular diseases (C01-C10). We also looked for Daily Defined Doses (DDD) measurement units. We adopted time frame and data was consequently used for analysis. Costs were used in EUR. **RESULTS:** Total increase in EUR spent on cardiovascular drugs was more than 60 million EUR (2012 vs 2005). Key growth drivers from selected ATC groups were Vasoprotectives and Calcium channel blockers with 78% and 88% growth respectively (2012 vs. 2005). Amount of drug costs allocated for cardiovascular disease escalated in 2011 with almost 197 million EUR, average price for package reached 5,38 EUR in same year and price per 1 DDD was 0,17 EUR per 1 DDD (2012) compare to 0,16 EUR (2005). Overall unit sales results from 2005 to 2012 show slide growth tendency till 2010 with following slight declined. Growth in units for all ATC group under our scope reached the level of 4,3% (2012 vs 2005). Standardized death rate for CVD decresed from 637,3 in 2005 to 510,4 in 2012 (per 100.000). **CONCLUSIONS:** Increase spending for CVD management translated also into decrease death rate (2012 vs 2005). It is important for regulatory bodies and payers to continue in taking adequate measures that will ensure rational pharmacotherapy alongside with improving prescribing behavior. Combining different measures, such as electronic prescription monitoring and promoting available guidelines for CVD management, could be an effective way.

PCV160
IMPLEMENTATION OF AN AUTOMATIC LABORATORY DATA CHECKING SYSTEM TO REDUCE DEDUCTION OF STATINS REIMBURSEMENT IN A TEACHING HOSPITAL IN TAIWAN
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OBJECTIVES: According to National Cholesterol Education Program Adult Treatment Panel IV, lipid-lowing agent is required if in patient with atherosclerotic risks. The annual cost of statins consumption was the first five human medications in Taiwan. Therefore, disallowed/deduction of reimbursement from Administration of National Health Insurance (NHI) was relatively higher than other drugs. An "Automatic Laboratory data Checking System" was established in order to enhance rational use of statins and to reduce deduction rate of statins reimbursement. This study aims to analyze the economic outcomes after implemented the system. **METHODS:** The major cause of deduction was the lipid profile fragmented in the medical record. To ensure rational use of statins based on NHI regulation, an "Automatic Laboratory data Checking System" in computerized physician order entry (CPOE) system was implemented in a teaching hospital on February 2013. When processing a statin prescription through CPOE system, the prescriber should choose the lipid profile linked with laboratory system in our hospital, or filled in lipid profile performed at outside source. The prescription would be blocked if the inspection date and laboratory data were not adherence to the NHI regulation. **RESULTS:** After system implementation, the deduction of statins reimbursement was significantly decreased. There were three indicators substantially improved in year 2013 than 2012: The average quarterly deduction was 2.16 million NTD reduced, the average quarterly deduction rate was 14% reduced (18.18% versus 3.95%), and the disallowed reimbursement account for 57.11% medication fee decreased to 7.17%. **CONCLUSIONS:** The present study demonstrated that "Automatic Laboratory data Checking System" lessen the economic burden of statins reimbursement based on NHI regulations. The system was associated with rational use of statins and reducing disallowed reimbursement as well.

PCV161
CLINICAL AND DEMOGRAPHICS CHARACTERISTICS OF NON-VALVULAR ATRIAL FIBRILLATION PATIENTS SWITCHING FROM WARFARIN TO NOVEL ORAL ANTICOAGULANTS
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OBJECTIVES: This real-world study evaluated the baseline characteristics of patients with non-valvular atrial fibrillation (NVAF) who had switched from warfarin to novel oral anticoagulants (NOACs). **METHODS:** Retrospective cohort study was conducted using the MarketScan® plus Earlyview data from 10/1/2009 to 12/31/2013. Adult NVAF patients (ICD-9 code 427.31 or 472.32) with one year of baseline period and a history of continuous warfarin use in the baseline period for at least 3 months immediately before the index date (defined as the first NOAC claim) were included. Patients with evidence of valvular heart disease, thyrotoxicosis, pericarditis, mitral stenosis, VTE, cardiac surgery, and endocarditis during the baseline period were excluded. Categorical variables were reported as percentages and frequencies, and continuous variables as means±SD. Categorical variables were compared using Pearson's chi-squared test while continuous variables were compared using wilcoxon signed-rank test. **RESULTS:** Among 11,743 eligible patients, 427 (3.64%) switched to apixaban, 8,989 (76.55%) to dabigatran and 2,327 (19.81%) to rivaroxaban.